

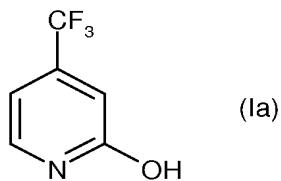
Claim Amendment

5. (Withdrawn).

6. (Withdrawn).

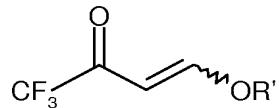
7. (Withdrawn).

8. (New) Process according to Claim 1 for the preparation of 4-trifluoromethyl-2-pyridinol



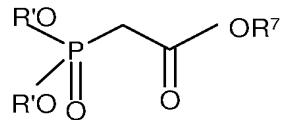
which comprises:

i) contacting a 4-alkoxy-1,1,1-trifluorobut-3-en-2-one of the formula



in which R' represents C₁-C₆ alkyl,

with a trialkyl phosphonoacetate of the formula:



in which R' is as previously defined,

and

R⁷ represents C₁-C₆ alkyl

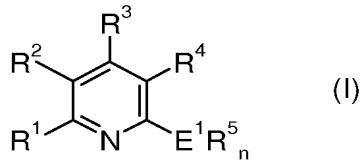
in the presence of a base and an alcoholic solvent to provide a mixture of intermediates,

and

ii) cyclizing the mixture of intermediates in the presence of ammonia to provide 4-trifluoromethyl-2-pyridinol.

Listing of Claims

1. (Original) Process for the preparation of substituted pyridine derivatives of formula (I)



wherein

R¹, R² independently the same or different are H; C₁₋₂₀-alkyl (branched or straight chain or cyclic); C₆₋₂₀-aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I, C₁₋₂₀-alkoxy, C₆₋₂₀-aryloxy, amino; F; Cl; Br; I;

R³ = CN, NO₂, C₁₋₂₀-alkyl (branched or straight chain or cyclic); C₆₋₂₀-aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I, C₁₋₂₀-alkoxy, C₆₋₂₀-aryloxy, amino; F; Cl; Br; I;

R⁴ = E_nR⁶_m in which

if n = m = 1 than E = S and R⁶ = C₁₋₂₀-alkyl (branched or straight chain or cyclic); C₆₋₂₀-aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I, C₁₋₂₀-alkoxy, C₆₋₂₀-aryloxy, amino; F, Cl, Br, I;

if n = 0 and m = 1 than R⁶ = H, C₁₋₂₀-alkyl (branched or straight chain or cyclic); C₆₋₂₀-aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I, C₁₋₂₀-alkoxy, C₆₋₂₀-aryloxy, amino; F, Cl, Br, I;

E¹ = O, N

R⁵ = H

n= 1 for E¹ = O und 2 for E¹ = N

comprising reaction of a α - β -unsaturated carbonyl compound of formula (II)

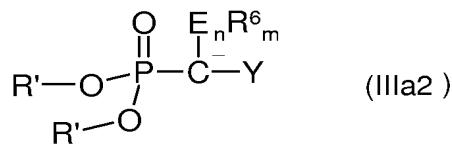
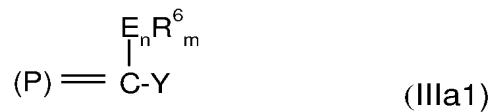


wherein

R^1 , R^2 and R^3 have the above defined meaning;

$G = -NH_2$ or a leaving group

with a Wittig reagent or Horner-Wadsworth-Emmons reagent of formula (III)



wherein

$(P) = P(Ar)_3$, with Ar = substituted or preferably unsubstituted C_{6-20} aryl, R' = is equal or different independently means C_{1-20} alkyl, branched or straight or cyclic, or C_{6-20} aryl;

$E_n R^6_m$ = in which

if $n = m = 1$ than $E = S$ and $R^6 = C_{1-20}$ -alkyl (branched or straight chain or cyclic); C_{6-20} -aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I, C_{1-20} -alkoxy, C_{6-20} -aryloxy, amino; F; Cl; Br; I;

if $n = 0$ and $m = 1$ than $R^6 = H$, C_{1-20} -alkyl (branched or straight chain or cyclic); C_{6-20} -aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I, C_{1-20} -alkoxy, C_{6-20} -aryloxy, amino; F; Cl; Br; I;

$Y = -CN; -C(O)NH_2; -C(O)OR^7$ with $R^7 =$ as defined for R^1 above, except H
in the presence of a base and if

- i) $Y = -CN$ or $C(O)NH_2$, G = a leaving group and the base is an alcoholate, subsequent acidic catalyzed, with zeolites catalyzed or basic catalyzed cyclization;
- ii) $Y = -C(O)-OR^7$, G = a leaving group and the base is an alcoholate, subsequent basic cyclization in the presence of ammonia.

2. (Original) Process according to claim 1, wherein $R^1 = R^2 = H$ and $R^3 =$ electron withdrawing group.

3. (Original) Process according to claims 1 to 2, wherein $R^1 = R^2 = H$ and R^3 is a partially or fully fluorinated C_{1-6} -alkylgroup.

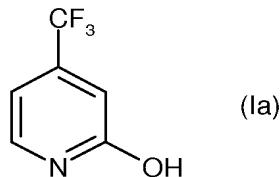
4. (Original) Process according to claims 1 to 3, wherein $R^3 = -CF_3$.

5. (Withdrawn)

6. (Withdrawn)

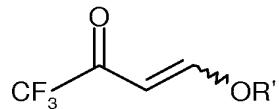
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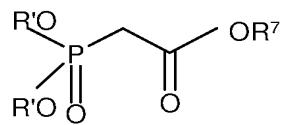
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ii) cyclizing the mixture of intermediates in the presence of ammonia to provide 4-trifluoromethyl-2-pyridinol.